

Municipal Solid Waste Generation, Recycling, and Disposal in the United States:

Facts and Figures for 2003

The Environmental Protection Agency has collected and reported data on the generation and disposal of waste in the United States for more than 40 years. We use the information to measure the success of municipal solid waste (MSW) reduction and recycling programs across the country. The data also shows us where we, as a nation, need to make environmental improvements. Because we only report this information every two years, these facts and figures are current through calendar year 2003. Both 2002 and 2003 data are reported here for the first time.

TRENDS IN MUNICIPAL SOLID WASTE

Municipal solid waste (MSW), usually known as trash or garbage, is made up of the things we commonly throw away. This household type of waste ranges from our package wrapping, food scraps, and grass clippings to our old sofas, computers, and refrigerators. It does not contain industrial, hazardous, or construction waste. Despite sustained improvements in waste reduction, household waste remains a constant concern because trends indicate that the overall tonnage we create continues to increase.

Since 1980, the total annual generation of MSW has increased more than 50 percent to its 2003 level of just over 236 million tons per year—topping 2002 by more than a half-million tons. Excluding

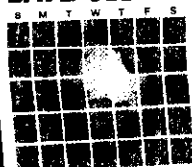
Recycling and Composting Programs for MSW

The latest recycling and composting figures we have are for 2002. In that year,

- Around 8,875 curbside recycling programs existed nationwide, down somewhat from 9,700 in 2001.
- About 3,227 community composting programs were operational, a slight decrease from 2001 figures.

The decreases in recycling and composting programs may be the result of some consolidation of curbside recycling programs and fewer states reporting composting data.

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SAVE TODAY?



RESOURCE CONSERVATION
CHALLENGE



Characterization and Monitoring Technology Focus Areas. This section highlights detailed background information on selected technologies that can be used for monitoring and measurement efforts in the needs areas. These background papers contain a description of how a technology works, what it has been and can be used for, and an extensive bibliography. The technology descriptions also list brief case studies to demonstrate both proven and emerging uses. Technology descriptions have been developed for **sampling equipment for obtaining sediment and pore water samples**, and for **open path monitoring systems** that use UV-DOAS, OP-FTIR, LIDAR, Raman spectroscopy, and tunable diode lasers.

The table below identifies the needs areas and specific topics of interest within them that fall within the focus of the 21M² Initiative.

Needs Areas	Specific Topics
Air Emissions Monitoring	<ul style="list-style-type: none"> Continuous emissions monitors for thermal hazardous waste treatment systems Remote sensing for fence-line monitoring for fugitive emissions
Mining Sites Characterizing and Monitoring	Monitoring technologies for mine waste sites
Contaminated Sediment Characterization	Sampling and analytical technologies for potentially contaminated sediment
Field Screening and/or Analytical Methods	<ul style="list-style-type: none"> Dioxin MTBE in soil and groundwater Perchlorate, particularly in water samples Pesticides and their degradation products
Indoor Air Quality	Monitoring vapor intrusion into buildings
In Situ Monitoring Systems	<ul style="list-style-type: none"> Sensor technologies for long-term groundwater monitoring In situ sensors for monitoring groundwater contamination and/or treatment system performance Leak detection technologies for small municipal landfills
Laboratory Analytical Methods	New methods for determining total cyanides and cyanide speciation
In Situ Remedies Performance Evaluation	In situ remediation systems and natural attenuation monitoring
Non-Invasive Subsurface Chemical Detection	<ul style="list-style-type: none"> Technologies for locating and monitoring DNAPL contamination Non-invasive monitoring technologies for mercury and heavy metals in soils
Underground Storage Tanks	<ul style="list-style-type: none"> Internal inspection methods for internally lined underground storage tanks (USTs) Leak detection methods for USTs and pipes

Additional Information

More information on the 21M² program is available from several sources:

- 21M² Program. <http://clu.in.org/programs/21m2/> or
- Michael Adam, U.S. EPA, 703-603-9915, adam.michael@epa.gov